

Appl. No. 09/937,634
Amdt. dated March 20, 2006
Reply to Office Action of December 21, 2005

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning on Line 20 of Page 5 of the specification with the following paragraph:

FIGURE 1 shows the operation of the present invention at the encrypting end of a communication channel. Data encryption is performed using two cryptographic algorithms, the first being a cryptographic pseudo random sequence generator $R()$ which is a sequence generating function and the second being a high-speed cipher $E()$ which is functionally a ciphering function. The high-speed cipher, which may be relatively weak in security when used alone. The pseudo random sequence generator accepts two inputs k and v and outputs a pseudo random sequence $s = R(k, v)$. The high-speed cipher accepts a secret key s and a data segment d and produces the ciphertext $c = E(s, d)$. In addition, the illustrative embodiment uses a pre-determined function $F()$ to update an initial value, i. e., $v_i = F(V_{i-1})$. It is assumed that the encrypting end and decrypting ends share a secret key k , an initial value v_0 , and the functions $F()$ and $R()$. Moreover, it is assumed that the decrypting end knows the decrypting algorithm $D()$ corresponding to the encrypting algorithm $E()$.